OPCAB surgery in obese patients is associated with reduced in-hospital morbidity and mortality rates when compared with conventional surgery with CPB and cardioplegic arrest [12]. In addition, there is compelling evidence that OPCAB surgery is associated with reduced circulating levels of inflammatory mediators, such as interleukin-8, which may have important practical implications because of the participation of this cytokine in neutrophil trafficking and myocardial injury [13].

Although obesity is considered to be a major risk factor in patients undergoing CABB surgery, this study showed that morbidity is not a risk factor for in-hospital mortality in this group of patients. This finding is in concurrence with other similar reports [7]. On the contrary, Prabhakar et al. found a significant increase of in-hospital mortality in obese patients who had a BMI higher than 35 kg/m². They found that moderate obesity was associated with a slight but statistically significant increase in risk-adjusted increase in mortality and extreme obesity (BMI > 40 kg/m²) had a nearly 50% increase in risk-adjusted mortality [14].

We also did not find any significant difference between obese and non-obese patients in several variables; for example, no difference was found in prolonged mechanical ventilation, length of ICU stays, incidence of AF following CABB surgery between these groups. This finding is in accordance with other studies [7].

An interesting finding of this study is the low incidence of SWI in both groups in spite of the high use of bilateral ITAs in coronary revascularization. The low incidence of SWI may be related to the use of skeletonized harvesting technique and the implementation of tight perioperative glucose control with intravenous insulin. This finding is in agreement with previous studies [15].

Several studies including our own have shown that obese patients are significantly younger [6]. Therefore, it is increasingly important to study the survival of these obese patients after CABB surgery.

5. Conclusion

Obesity is not a risk factor for in-hospital morbidity and all cause hospital mortality after OPCAB aorta no-touch coronary revascularization. Similarly, no differences were found in early postoperative complications, such as stroke, re-exploration for bleeding, AF, acute renal failure, pulmonary complications, prolonged mechanical ventilation, SWI, perioperative need for IABP and psychological complications, in this group of patients.

References


eComment: Improving results with additional technique

We are really impressed with the good results shown in this paper [1], especially regarding the perioperative stroke, which is very low (0 and 0.3%). However, the sternal wound infection is still a concern in obese patients.

We strongly believe that a combination of the aorta no-touch technique as suggested by the authors with a non-sternotomic approach like a left anterior thoracotomy, as our group has been using routinely since 2002, could improve results even more.

In our experience with more than 1300 coronary patients with the above-mentioned technique, we totally eliminated the risk of ischemic and mediastinitis. Furthermore, this approach has allowed us the incorporation of ultra fast-track protocols for very early hospital discharge of the patients.

In conclusion, the results of this paper are very encouraging, and it would be interesting to perform a study with the combination of both techniques.

Reference